

## Amendment to the Claims

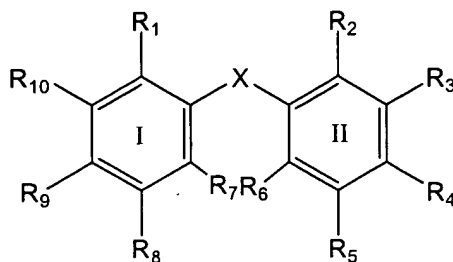
This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

1-6. (canceled)

7. (currently amended) An antimalarial composition comprising an inhibitor of fatty acid synthesis of the malarial parasite for treating malaria in an amount effective for the treatment of malaria.

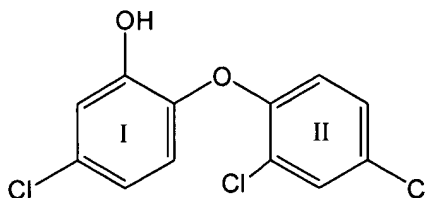
8. (currently amended) An antimalarial composition comprising an inhibitor of fatty acid synthesis ~~or its pharmaceutically acceptable derivatives either alone or~~ in combination with one or more known antimalarials and ~~along with~~ a pharmaceutically acceptable adjuvant, ~~or a~~ diluent, or [a] carrier.

9. (currently amended) An antimalarial composition as claimed in claim 7 wherein the inhibitor of fatty acid synthesis used is a hydroxydiphenyl ether of general formula 2 given below wherein the two phenyl rings (I & II) are joined by an oxygen (X=O) atom and either R<sub>1</sub> or R<sub>2</sub> represent a hydroxy (OH) group and the other being a hydrogen atom, respectively, or both being hydroxy groups and other positions (R<sub>3</sub> to R<sub>10</sub>) of the phenyl rings I and II being ~~substituted in various permutations and combinations by~~ selected from the group consisting of chlorine, bromine or iodine atoms or hydroxy, aldehyde or keto groups or hydrogen atoms or ester ~~groups~~ group and ~~optionally the two phenyl rings being joined by a sulfur atom (X=S) or by a methylene (X=CH<sub>2</sub>) group.~~



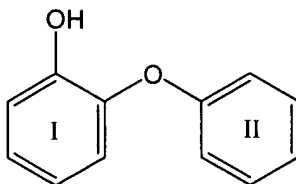
Formula 2

10. (currently amended) An antimalarial composition as claimed in claim 7 wherein the inhibitor of fatty acid synthesis used is a hydroxydiphenyl ether of general formula 2 represented by triclosan [~~2',4,4'~~ trichloro-2-hydroxydiphenyl ether which can also be written as 2,4,4'' trichloro-2'-hydroxydiphenyl ether. This is also named as 5-chloro-2-(2,4-dichlorophenoxy)phenol] ~~of having~~ formula 1 given below:



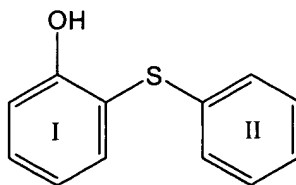
Formula 1

11. (currently amended) An antimalarial composition as claimed in claim 7 wherein the inhibitor of fatty acid synthesis used is a hydroxydiphenyl ether ~~having of general formula 2 represented by the compounds of formula 3 and 4~~ given below.



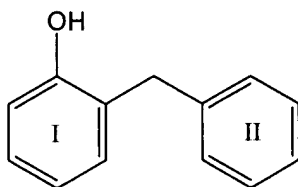
Formula 3

12. (currently amended) An antimalarial composition as claimed in claim 7 wherein the inhibitor of fatty acid synthesis used is a hydroxydiphenyl thioether ~~having analogs of general formula 2 represented by the compounds of formulas~~ formula 5 and 6 given below:



Formula 5

13. (currently amended) An antimalarial composition as claimed in claim 7 wherein the inhibitor of fatty acid synthesis ~~used is~~ a hydroxydiphenyl methane analog having analogs (e.g. Chlorophenes) of general formula 2 represented by the compounds of formulas formula 7 and 8 given below:



Formulas 7

14. (canceled)

15. (currently amended) An antimalarial composition as claimed in claim 7 for treating a malarial condition wherein the amount of the fatty acid synthesis inhibitor used is in the dosage range of 0.03 mg/kg to 100 mg/kg ~~of~~ for a human or an animal subject for treating a malarial condition.

16. (previously presented) An antimalarial composition as claimed in claim 7 wherein the inhibitor of fatty acid synthesis used is cerulenin.

17-18. (canceled)

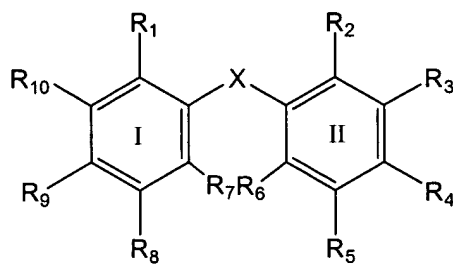
19. (currently amended) An antimalarial drug target comprising a component of a fatty acid synthesis pathway in a malarial parasite, wherein the component is selected from the group consisting of ( $\beta$ -hydroxydecanoyl-ACP dehydrase,  $\beta$ -ketoacyl-ACP synthase I, malonyl-CoA:ACP transacylase,  $\beta$ -ketoacyl-ACP synthase II,  $\beta$ -ketoacyl-ACP reductase,

$\beta$ -ketoacyl-ACP-synthase III, enoyl-ACP reductase, or  $\beta$ -hydroxyacyl-ACP dehydrase, and as claimed in claim 17 wherein the malarial parasite used is *P. falciparum*.

20. (currently amended) An antimalarial drug target comprising a component of a fatty acid synthesis pathway in a malarial parasite, wherein the component is selected from the group consisting of ( $\beta$ -hydroxydecanoyl-ACP dehydrase,  $\beta$ -ketoacyl-ACP synthase I, malonyl-CoA:ACP transacylase,  $\beta$ -ketoacyl-ACP synthase II,  $\beta$ -ketoacyl-ACP reductase,  $\beta$ -ketoacyl-ACP-synthase III, enoyl-ACP reductase, or  $\beta$ -hydroxyacyl-ACP dehydrase, and as claimed in claim 17 wherein the malarial parasite used is of human or animal origin.

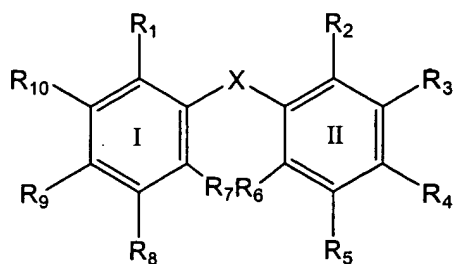
21-35. (canceled)

36. (new) The compound of formula 9, wherein X is selected from the group consisting of O, S, and CH<sub>2</sub>, wherein at least one of the positions R<sub>9</sub> or R<sub>4</sub> or R<sub>7</sub> or R<sub>6</sub> is an aldehyde group or a ketone group having at least 5 C atoms, wherein R<sub>1</sub> or R<sub>2</sub> is a hydroxyl (OH) group with the other being a hydrogen atom, and wherein at least one of R<sub>1</sub> to R<sub>10</sub> is a halogen atom.



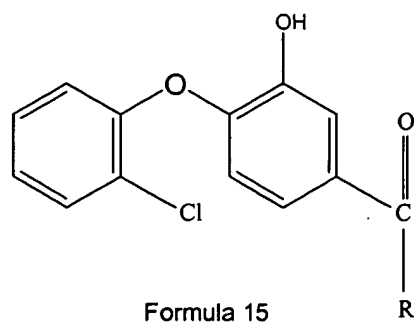
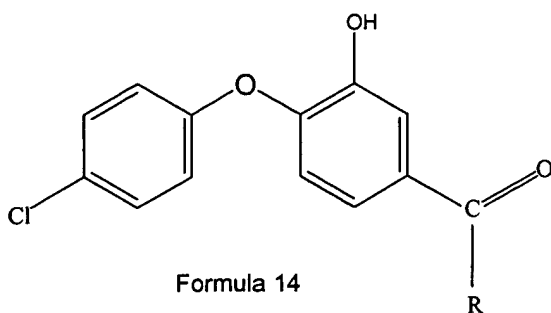
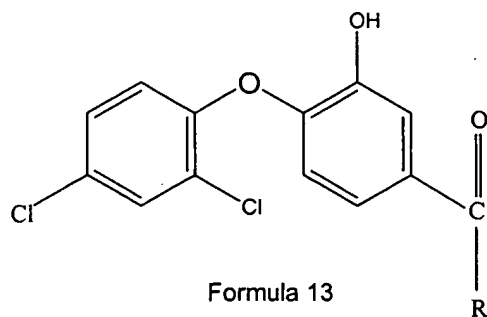
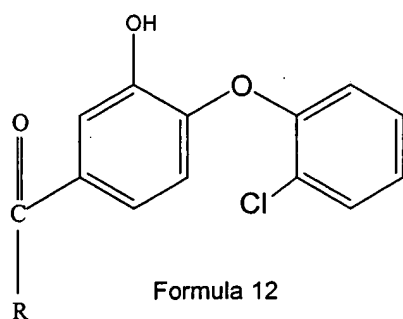
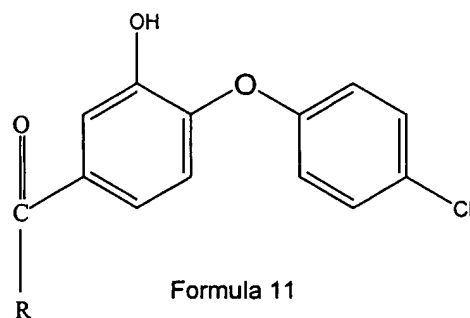
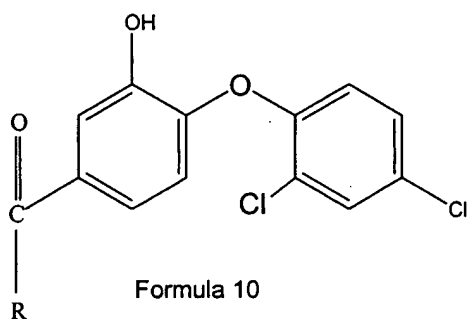
Formula 9

37. (new) The compound of formula 9, wherein X is selected from the group consisting of O, S, and CH<sub>2</sub>, wherein at least one of the positions R<sub>9</sub> or R<sub>4</sub> or R<sub>7</sub> or R<sub>6</sub> is an aldehyde group or a ketone group having at least 5 C atoms, wherein R<sub>1</sub> and R<sub>2</sub> are hydroxyl (OH) groups, and wherein at least one of R<sub>1</sub> to R<sub>10</sub> is a halogen atom.



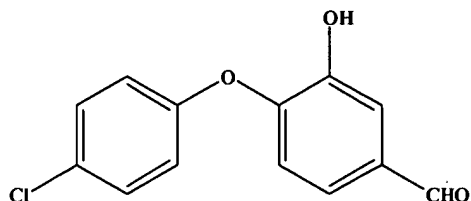
Formula 9

38. (new) A compound selected from the group consisting of formulas 10 – 15 below, wherein R is selected from the group consisting of: H and ketones having at least 5 C atoms:



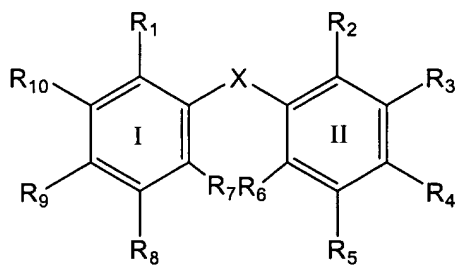
39. (new) The compound of claim 38, wherein R is H.

40. (new) A compound having formula 16:



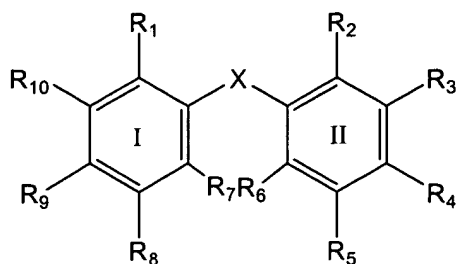
Formula 16

41. (new) A compound of general formula 2 given below wherein the two phenyl rings (I & II) are joined by a sulfur atom ( $X = S$ ) and either  $R_1$  or  $R_2$  is a hydroxyl (OH) group with the other being a hydrogen atom, respectively, or both being hydroxyl groups, and substituents at other positions ( $R_3$  to  $R_{10}$ ) of the phenyl rings I and II being selected from the group consisting of hydrogen, chlorine, bromine or iodine atoms or hydroxyl, aldehyde, ester, or keto groups.



Formula 2

42. (new) A compound of general formula 2 given below wherein the two phenyl rings (I & II) are joined by a  $CH_2$  group and either  $R_1$  or  $R_2$  is a hydroxyl (OH) group with the other being a hydrogen atom, respectively, or both being hydroxyl groups, and substituents at other positions ( $R_3$  to  $R_{10}$ ) of the phenyl rings I and II being selected from the group consisting of hydrogen, chlorine, bromine or iodine atoms or hydroxyl, aldehyde, ester, or keto groups.



Formula 2

43. (new) The antimalarial composition of claim 9, wherein the malarial parasite is a drug resistant malarial parasite.

44. (new) The composition of claim 8, wherein the inhibitor of fatty acid synthesis is a hydroxydiphenyl ether.

45. (new) The composition of claim 8, wherein the inhibitor of fatty acid synthesis is triclosan.

46. (new) The composition of claim 8, wherein the inhibitor of fatty acid synthesis is cerulenin.

47. (new) The composition of claim 8, wherein the known antimalarial is selected from the group consisting of: quinine, atabrine, chloroquine, mefloquine, primaquine, and artemether.

48. (new) The composition of claim 8, wherein the inhibitor of fatty acid synthesis is a hydroxydiphenyl ether and the known antimalarial is selected from the group consisting of: quinine, atabrine, chloroquine, mefloquine, primaquine, and artemether.

49. (new) The composition of claim 8, wherein the inhibitor of fatty acid synthesis is selected from the group consisting of triclosan and cerulenin and the known antimalarial is selected from the group consisting of: quinine, atabrine, chloroquine, mefloquine, primaquine, and artemether.


50. (new) A composition comprising triclosan and cerulenin.

Applicant submits that the Amendment to the Claims enclosed herein brings the Amendment filed Feb. 25, 2004, into compliance with 37 C.F.R. §1.121. Applicant therefore submits that the present case is in condition for allowance. A Notice to that effect is respectfully requested.

If, at any time, it appears that a phone discussion would be helpful, the undersigned would greatly appreciate the opportunity to discuss such issues at the Examiner's convenience. The undersigned can be contacted at (617) 248-5000 or (617) 248-5071 (direct dial).

Please charge any fees associated with this filing, or apply any credits, to our Deposit Account No. 03-1721.

Respectfully submitted,



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Date: April 5, 2004

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